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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/688,911 | 10/21/2003 | Tae-jung Yoon | 1349.1301 | 3775 |
| 21171 | 7590 | 11/12/2010 | EXAMINER | |
| STAAS & HALSEY LLP | | | DICKERSON, CHAD S | |
| SUITE 700 | | | ART UNIT | PAPER NUMBER |
| 1201 NEW YORK AVENUE, N.W. | | | | 2625 |
| WASHINGTON, DC 20005 | | | MAIL DATE | DELIVERY MODE |
| | | | 11/12/2010 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|---------------------------------------|
| Office Action Summary | Application No. 10/688,911 | Applicant(s) YOON, TAE-JUNG |
| | Examiner CHAD DICKERSON | Art Unit 2625 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

Status

- 1) Responsive to communication(s) filed on 16 October 2010.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 42 and 43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 42 and 43 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 21 October 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/96/08)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 37-41 have been considered but are not persuasive. The references of Tsukamoto '033, the description of the related art and Kanno "609 are still being applied to the claim language. The applicant added an amendment to the claims in the first Amendment on 10/6/2010 that comprised of determining whether or not a program is executable and notifying the user of the fact the program is not executable. The Examiner found in the primary reference of Tsukamoto that the system can determine if a program on a card cannot be executed on a copier and it notifies the user to change the card to overcome an error or contradiction through the copier's operation panel¹. The Okubo '471 reference was added to the previous combination to have a message that displays that the program is not executable or operable on the copier². Since the previous reference of Tsukamoto already contains a display device on the image forming apparatus that displays an error message, the Examiner used the Okubo reference to modify the primary reference to display a different type of failure message through the copier's operation panel of Tsukamoto reference. Since the primary reference already discloses using the operation panel to display an error message, the Examiner believes that it would have been obvious to one of ordinary skill to program the copier of Tsukamoto or incorporate the error message of the Okubo reference into the invention disclosed in the Tsukamoto

¹ See Tsukamoto '033 at ¶ [0171]-[0181].

² See Okubo '471 at ¶ [0133]-[0135].

reference in order to display to the user that a program to be downloaded onto the copier is not operable within the device

Therefore, with the combination of the previously applied references with Okubo '471, the new claims are disclosed.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukamoto '033 (US Pub No 2002/0048033) in view of the Description of the Related Art, Kanno '609 (USP 6252609) and Okubo '471 (US pub 2003/0058471).

Re claim 42: Tsukamoto '033 discloses an image forming apparatus comprising:

a printing unit to execute printing functions (i.e. the communication apparatus comprises a recording portion that is able to perform printing functions; see fig. 1, paragraphs [0036]-[0038]);

a processor to control functions executed by the image forming apparatus (i.e. in the system of Tsukamoto, since the CPU (101) controls the apparatus with a program stored in ROM (102), this is considered as the main program being executed in the copier device; see paragraph [0029]),

a memory (i.e. the RAM or ROM is considered as the memory; see paragraphs [0029] and [0030]);

an operation panel unit (i.e. the operation portion (104) is considered as the operation panel; see paragraph [0031]);

a first interface connected with an external apparatus to receive print data (i.e. as seen in figure 1, the printer interface card (116) is used to connect a PC to a printing device to output data from a PC; see *p [0044]-[0050] and [0142]-[0165]); and

a second interface, separate from the first interface, to removably receive a portable storage unit providing an additional function related to the image forming apparatus that was not previously supported by the image forming apparatus (i.e. in the system, the program IC card (1304) stores a program that adapts the copier to use the interface card (1303) that is used to connect a PC to the image forming apparatus. The program IC card that introduces a program to use the interface card for communication between the PC and the copier is considered as an additional function related to the image forming apparatus that was not previously supported. If the function was previously supported or functioning on the copier, the program IC card (1304) would not be needed for communication between the two devices; see ¶ [0142]-[0165]),

wherein the processor determines whether the portable storage unit is installed in the second interface, and determines whether an execution file is stored in the portable storage unit is executable (i.e. in the system, a card storing data, which can be image data or a program, can be used. The program relating to the CPU (101) that reads the card can determine whether the card contains a program to execute a function or data

that is simply exchanged between the memory card and RAM (103). The program IC card and interface card can be considered as a portable storage units since they both store either a function to be realized by a printer or the software to perform the function. Within the system, the software on the cards are corresponding to, or related with, the main program on the copier since these introduced programs work with the main program to perform some function. In addition, the system determines if the card software can be executed with the programs available on the copier device; see figs. 26-28, 31-42; paragraphs [0030], [0115]-[0134] and [0171]-[0181]),

wherein if the execution file in the portable storage unit is not executable, the processor displays a message via operation panel (i.e. the user is notified on a display to change a card in order to overcome an error or contradiction because the program on the card is not able to be executed; see ¶ [0171]-[0181]);

wherein if it is determined that the portable storage unit is installed in the second interface and the execution file is stored in the portable storage unit (i.e. in the system, a card storing data, which can be image data or a program, can be used. The program relating to the CPU (101) that reads the card can determine whether the card contains a program to execute a function or data that is simply exchanged between the memory card and RAM (103). The program IC card and interface card can be considered as a portable storage units since they both store either a function to be realized by a printer or the software to perform the function. Within the system, the software on the cards are corresponding to, or related with, the main program on the copier since these

introduced programs work with the main program to perform some function; see figs. 26-28, 31-42; paragraphs [0030], [0115]-[0134] and [0171]-[0181]).

However, Tsukamoto '033 fails to specifically teach wherein the processor executes a plurality of programs in response to powering on of the image processing apparatus.

However, this is well known in the art as evidenced by the description of the related art. The description of the related art discloses wherein the processor executes a plurality of programs in response to powering on of the image processing apparatus (i.e. as disclosed in the description of the related art, upon receipt of the power supply, the control unit controls the entire operation of the printer, which includes controlling the multiple programs associated with the multiple features of the printer; see paragraph [0005] of Applicant's spec).

Therefore, in view of the description of the related art, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of wherein the processor executes a plurality of programs in response to powering on of the image processing apparatus, incorporated in the device of Tsukamoto '033, in order to control the entire operation of the printer (as stated in the description of the related art paragraph [0004]).

However, the combination of Tsukamoto and the description of the related art '033 fails to specifically teach the processor displays a menu via the operation panel unit to enable a user to select an execution of the additional function related to the image forming apparatus, wherein when the user selects the additional function via the

operation panel unit, a plug-in program corresponding to the additional function selected by the user stored in the portable storage unit is executed.

However, this is well known in the art as evidenced by Kanno '609. Kanno '609 discloses the processor displays a menu via the operation panel unit to enable a user to select an execution of the additional function related to the image forming apparatus (i.e. the device of Kanno is similar to Tsukamoto since both inventions involve executing programs introduced to a copier through an IC card (same field of endeavor). However, in Kanno '609, the system discloses showing a user a list, or menu, of functions that have been stored on the IC card and that can be selected and used in the copier device; see col. 10, ll. 14-36);

wherein when the user selects the additional function via the operation panel unit (i.e. the user is able to select the functions in the list by operating the control panel (114) of the copier device and this selection is accepted as a request to execute a program; see fig. 6, col. 10, ll. 14-36); and

a plug-in program corresponding to the additional function selected by the user stored in the portable storage unit is executed (i.e. the copier receives this selection through the control panel and operates the selected feature in the manner related to the copier device; see fig. 6, col. 10, ll. 14-36).

Therefore, in view of Kanno '609, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of displays a menu via the operation panel unit to enable a user to select an execution of the additional function related to the image forming apparatus, wherein when the user selects the additional

function via the operation panel unit, a plug-in program corresponding to the additional function selected by the user stored in the portable storage unit is executed, incorporated in the device of Tsukamoto '033, as modified by the description of the related art in Applicant's spec, in order to display a list of functions stored on an IC card (as stated in Kanno '609 col. 10, ll. 17-24).

However, the combination of Tsukamoto '033 in view of the description of the related art and Kanno '609 fails to specifically teach displays a message via operation panel unit a message that the execution file in the portable storage unit cannot be executed.

However, this is well known in the art as evidenced by Okubo '471. Okubo '471 discloses displays a message via operation panel unit a message that the execution file in the portable storage unit cannot be executed (i.e. like the systems of Tsukamoto and Kanno, a computer may transmit information to and from a copier or printing device for processing (same field of endeavor). However, the system of Okubo '471 specifically discloses that a host computer is notified that the image processing program candidate from a data storing medium is not operable on the copier device. This feature notifies the user at the computer of the non-operable program within the copier; see ¶ [0133]-[0135]).

Therefore, in view of Okubo '471, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of displaying a message via operation panel unit, a message that the execution file in the portable storage unit cannot be executed, incorporated in the device of Tsukamoto '033, as modified by the

features of the description of the related art and Kanno '609, in order to send a notification to a user when the copier determines that the individual processing program to be downloaded is not operable within the device (as stated in Okubo '471 at ¶ [0018]).

Re claim 43: Tsukamoto '033 discloses an image forming apparatus comprising:

a printing unit to execute printing functions (i.e. the communication apparatus comprises a recording portion that is able to perform printing functions; see fig. 1, paragraphs [0036]-[0038]);

a processor to control functions executed by the image forming apparatus (i.e. in the system of Tsukamoto, since the CPU (101) controls the apparatus with a program stored in ROM (102), this is considered as the main program being executed in the copier device; see paragraph [0029]),

a memory (i.e. the RAM or ROM is considered as the memory; see paragraphs [0029] and [0030]);

an operation panel unit (i.e. the operation portion (104) is considered as the operation panel; see paragraph [0031]);

a first interface connected with an external apparatus to receive print data (i.e. as seen in figure 1, the printer interface card (116) is used to connect a PC to a printing device to output data from a PC; see *p [0044]-[0050] and [0142]-[0165]); and

a second interface, separate from the first interface, to removably receive a portable storage unit providing an additional function related to the image forming

apparatus that was not previously supported by the image forming apparatus (i.e. in the system, the program IC card (1304) stores a program that adapts the copier to use the interface card (1303) that is used to connect a PC to the image forming apparatus. The program IC card that introduces a program to use the interface card for communication between the PC and the copier is considered as an additional function related to the image forming apparatus that was not previously supported. If the function was previously supported or functioning on the copier, the program IC card (1304) would not be needed for communication between the two devices; see *p [0142]-[0165]),

wherein the processor determines whether the portable storage unit is installed in the second interface, and determines whether an execution file is stored in the portable storage unit is executable (i.e. in the system, a card storing data, which can be image data or a program, can be used. The program relating to the CPU (101) that reads the card can determine whether the card contains a program to execute a function or data that is simply exchanged between the memory card and RAM (103). The program IC card and interface card can be considered as a portable storage units since they both store either a function to be realized by a printer or the software to perform the function. Within the system, the software on the cards are corresponding to, or related with, the main program on the copier since these introduced programs work with the main program to perform some function. In addition, the system determines if the card software can be executed with the programs available on the copier device; see figs. 26-28, 31-42; paragraphs [0030], [0115]-[0134] and [0171]-[0181]),

wherein if it is determined that the portable storage unit is installed in the second interface and the execution file is stored in the portable storage unit (i.e. in the system, a card storing data, which can be image data or a program, can be used. The program relating to the CPU (101) that reads the card can determine whether the card contains a program to execute a function or data that is simply exchanged between the memory card and RAM (103). The program IC card and interface card can be considered as a portable storage units since they both store either a function to be realized by a printer or the software to perform the function. Within the system, the software on the cards are corresponding to, or related with, the main program on the copier since these introduced programs work with the main program to perform some function; see figs. 26-28, 31-42; paragraphs [0030], [0115]-[0134] and [0171]-[0181]),

wherein if the execution file in the portable storage unit is not executable, the processor displays a message via operation panel (i.e. the user is notified on a display to change a card in order to overcome an error or contradiction because the program on the card is not able to be executed; see ¶ [0171]-[0181]);

wherein the function corresponds to one of the programs executed by the processor in response to the powering on of the image forming apparatus (i.e. if the system does not contain a communication card, a user can add such a card to the system. Once the card is added to the apparatus and power is supplied to the body of the apparatus, the system then recognizes the functions of the card and executes this function based on the user input and powering on of the apparatus; see figs. 21 and 22, ¶ [0084]-[0107]),

wherein the plug-in program does not have an independent interface and can be used by being connected with the corresponding one of the executed programs (i.e. the program on the IC card has to be connected to the main program running the overall printing device in order for the function associated with the IC card to operate; see paragraphs [0079], [0126]-[0129] and [0161]-[0173]) and

provides additional function to the one of the executed programs that was not previously supported by the one of the executed programs (i.e. in the Tsukamoto reference, an additional function card (1602) is used to introduce a function that was previously impossible for the CPU (101) to do without the function card. The additional function card introduces a new function to the system that was not previously performed before the card was brought into interaction with the copier's application program; see paragraphs [0079], [0126]-[0129] and [0161]-[0173]).

However, Tsukamoto '033 fails to specifically teach one of the programs executed by the processor in response to the powering on of the image processing apparatus.

However, this is well known in the art as evidenced by the description of the related art. The description of the related art discloses one of the programs executed by the processor in response to the powering on of the image processing apparatus (i.e. as disclosed in the description of the related art, upon receipt of the power supply, the control unit controls the entire operation of the printer, which includes controlling the multiple programs associated with the multiple features of the printer; see paragraph [0005] of Applicant's spec).

Therefore, in view of the description of the related art, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of one of the programs executed by the processor in response to the powering on of the image processing apparatus, incorporated in the device of Tsukamoto '033, in order to control the entire operation of the printer (as stated in the description of the related art paragraph [0004]).

However, the combination of Tsukamoto and the description of the related art '033 fails to specifically teach the processor displays a menu via the operation panel unit to enable a user to select an execution of the additional function related to the image forming apparatus, wherein the additional function selectable by the user corresponds to one of the programs executed by the processor, wherein when the user selects the additional function via the operation panel unit, a plug-in program corresponding to the additional function selected by the user stored in the portable storage unit is executed.

However, this is well known in the art as evidenced by Kanno '609. Kanno '609 discloses the processor displays a menu via the operation panel unit to enable a user to select an execution of the additional function related to the image forming apparatus (i.e. the device of Kanno is similar to Tsukamoto since both inventions involve executing programs introduced to a copier through an IC card (same field of endeavor). However, in Kanno '609, the system discloses showing a user a list, or menu, of functions that have been stored on the IC card and that can be selected and used in the copier device; see col. 10, II. 14-36);

wherein the additional function selectable by the user corresponds to one of the programs executed by the processor, wherein when the user selects the additional function via the operation panel unit (i.e. the user is able to select the functions in the list by operating the control panel (114) of the copier device and this selection is accepted as a request to execute a program; see fig. 6, col. 10, ll. 14-36); and

a plug-in program corresponding to the additional function selected by the user stored in the portable storage unit is executed (i.e. the copier receives this selection through the control panel and operates the selected feature in the manner related to the copier device; see fig. 6, col. 10, ll. 14-36).

Therefore, in view of Kanno '609, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of the processor displays a menu via the operation panel unit to enable a user to select an execution of the additional function related to the image forming apparatus, wherein the additional function selectable by the user corresponds to one of the programs executed by the processor, wherein when the user selects the additional function via the operation panel unit, a plug-in program corresponding to the additional function selected by the user stored in the portable storage unit is executed, incorporated in the device of Tsukamoto '033, as modified by the description of the related art in Applicant's spec, in order to display a list of functions stored on an IC card (as stated in Kanno '609 col. 10, ll. 17-24).

However, the combination of Tsukamoto '033 in view of the description of the related art and Kanno '609 fails to specifically teach displays a message via operation

panel unit a message that the execution file in the portable storage unit cannot be executed.

However, this is well known in the art as evidenced by Okubo '471. Okubo '471 discloses displays a message via operation panel unit a message that the execution file in the portable storage unit cannot be executed (i.e. like the systems of Tsukamoto and Kanno, a computer may transmit information to and from a copier or printing device for processing (same field of endeavor). However, the system of Okubo '471 specifically discloses that a host computer is notified that the image processing program candidate from a data storing medium is not operable on the copier device. This feature notifies the user at the computer of the non-operable program within the copier; see ¶ [0133]-[0135]).

Therefore, in view of Okubo '471, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of displaying a message via operation panel unit, a message that the execution file in the portable storage unit cannot be executed, incorporated in the device of Tsukamoto '033, as modified by the features of the description of the related art and Kanno '609, in order to send a notification to a user when the copier determines that the individual processing program to be downloaded is not operable within the device (as stated in Okubo '471 at ¶ [0018]).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
5. Suzuki '288 (USP 5027288) discloses systems in which a recording apparatus can have various recording functions altered and add various other functions using a portable storage means such as an IC card.
6. Murata '067 (USP 6330067) discloses a digital copying machine that has a card slot that is able to determine if a card is present in the card slot and the type of information present on the card to be download onto the copying machine and processed in the digital device.
7. Fukui (USP 5678135) discloses a system that updates an image forming apparatus with new programs that allow newly added features to function with the printing device. The programs may be provided from a network connected source or a storage medium inside the portable extension part connected to the apparatus to expand the printing device's features.
8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAD DICKERSON whose telephone number is (571)270-1351. The examiner can normally be reached on 9:30-6:00pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CHAD DICKERSON
Examiner
Art Unit 2625

/Twyler L. Haskins/
Supervisory Patent Examiner, Art Unit 2625